**Compare rate of change**

**LE.3**

Answer each question in your notebook. You will be graded at the end of the day based on your participation and your groups work.

Directions:

1. Use pattern # 1 on the board.
   1. Replicate this pattern with beans
   2. Draw the pattern in your journal; label it “pattern #1”
   3. Make a table in your journal with “x” as the term number and “y” as the total number of beans.
   4. Use beans to show what term 4 should look like.
   5. Add this info to your table.
   6. Create a graph of your data table.
   7. Write an equation that represents Pattern #1
2. Use pattern #2 on the board.
   1. Replicate this pattern with beans
   2. Draw the pattern in your journal; label it “pattern #2”
   3. Make a table in your journal with “x” as the term number and “y” as the total number of beans.
   4. Use beans to show what term 4 should look like (check with teacher before moving on)
   5. Add this info to your table.
   6. Create a graph of your data table.
   7. Write an equation that represents Pattern #2
3. Reflection questions (on an EXIT TICKET!):
   1. From term 0-1 in both patterns, which pattern has the greatest rate of change? How do you know?
   2. From term 3-4 in both patterns, which pattern has the greatest rate of change? How do you know?
   3. What specific characteristic in the equations is responsible for the difference in rate of change between pattern #1 and #2?